

Author Index

- Ahmad Khan, J., *see* Naheed, G. and Ahmad Khan, J.
Algers, B., Jensen, P. and Steinwall, L. (Skara, Sweden)
Behaviour and weight changes at weaning and regrouping of pigs in relation to teat quality 143
Algers, B. (Skara, Sweden), Rojanasthien, S. (Uppsala, Sweden) and Uvnäs-Moberg, K. (Stockholm, Sweden)
The relationship between teat stimulation, oxytocin release and grunting rate in the sow during nursing 267
Anderson, D.M., Hulet, C.V., Smith, J.N. (Las Cruces, NM, U.S.A.), Hamadeh, S.K. (Beirut, Lebanon) and Murray, L.W. (Las Cruces, NM, U.S.A.)
Diet selection of bonded and non-bonded free-ranging sheep and cattle 231
Appleby, M.C., *see* Manson, F.J. and Appleby, M.C.
Ayling, S.J., *see* McGregor, P.K. and Ayling, S.J.
Bond, J.C. (Davis, CA, U.S.A.) and Lindburg, D.G. (San Diego, CA, U.S.A.)
Carcass feeding of captive cheetahs (*Acinonyx jubatus*): the effects of a naturalistic feeding program on oral health and psychological well-being 373
Day, B.N., *see* Rohde Parfet, K.A. et al.
Dellmeier, G., Friend, T. (College Station, TX, U.S.A.) and Gbur, E. (Fayetteville, AR, U.S.A.)
Effects of changing housing on open-field behavior of calves 215
Duncan, I.J.H., Hocking, P.M. and Seawright, E. (Midlothian, Gt. Britain)
Sexual behaviour and fertility in broiler breeder domestic fowl 201
Friend, T., *see* Dellmeier, G. et al.
Ganjam, V.K., *see* Rohde Parfet, K.A. et al.
Gbur, E., *see* Dellmeier, G. et al.
Hamadeh, S.K., *see* Anderson, D.M. et al.
Hargreaves, A.L. and Hutson, G.D. (Parkville, Vic., Australia)
The stress response in sheep during routine handling procedures 83
Hargreaves, A.L. and Hutson, G.D. (Parkville, Vic., Australia)
Changes in heart rate, plasma cortisol and haematocrit of sheep during a shearing procedure 91
Hargreaves, A.L. and Hutson, G.D. (Parkville, Vic., Australia)
An evaluation of the contribution of isolation, up-ending and wool removal to the stress response to shearing 103
Hargreaves, A.L. and Hutson, G.D. (Parkville, Vic., Australia)
The effect of gentling on heart rate, flight distance and aversion of sheep to a handling procedure 243
Hargreaves, A.L. and Hutson, G.D. (Parkville, Vic., Australia)
Some effects of repeated handling on stress responses in sheep 253
Haskell, M.J., *see* Hutson, G.D. and Haskell, M.J.
Hocking, P.M., *see* Duncan, I.J.H. et al.
Hopster, H., *see* Wierenga, H.K. and Hopster, H.
Houpt, K.A., *see* Zahorik, D.M. et al.
Hulet, C.V., *see* Anderson, D.M. et al.
Hutson, G.D., *see* Hargreaves, A.L. and Hutson, G.D.
Hutson, G.D. and Haskell, M.J. (Parkville, Vic., Australia)
The behaviour of farrowing sows with free and operant access to an earth floor 363

Innes, S., <i>see Kovacs, K.M. and Innes, S.</i>	
Jensen, P., <i>see Algers, B. et al.</i>	
Jeppesen, L.L., <i>see Pedersen, V. and Jeppesen, L.L.</i>	
Kojola, I. (Meltaus, Finland)	
Intraherd spacing behaviour of female reindeer: effects of kinship, age and habituation ...	41
Kooijman, J., <i>see van Liere, D.W. et al.</i>	
Kovacs, K.M. (Waterloo, Ont., Canada) and Innes, S. (Rockwood, Ont., Canada)	
The impact of tourism on harp seals (<i>Phoca groenlandica</i>) in the Gulf of St. Lawrence, Canada	15
Lamberson, W.R., <i>see Rohde Parfet, K.A. et al.</i>	
Lindburg, D.G., <i>see Bond, J.C. and Lindburg, D.G.</i>	
Manson, F.J. and Appleby, M.C. (Edinburgh, Gt. Britain)	
Spacing of dairy cows at a food trough	69
McGregor, P.K. and Ayling, S.J. (Nottingham, Gt. Britain)	
Varied cages result in more aggression in male CFLP mice	277
Murray, L.W., <i>see Anderson, D.M. et al.</i>	
Naheed, G. and Ahmad Khan, J. (Aligarh, India)	
"Poison shyness" and "bait shyness" developed by wild rats (<i>Rattus rattus</i> L.). IV.	
Effect of poisoning with thallous sulphate	49
Orihuela, A. (Morelos, Mexico)	
Effect of the calf stimulus on the milk yield of Zebu-type cattle	187
Pedersen, V. (Tjele, Denmark) and Jeppesen, L.L. (Copenhagen, Denmark)	
Effects of early handling on later behaviour and stress responses in the silver fox (<i>Vulpes vulpes</i>)	383
Petersen, V., Vestergaard, K. (Frederiksberg C., Denmark) and Recén, B. (Skara, Sweden)	
Behaviour of sows and piglets during farrowing under free-range conditions	169
Price, E.O. and Wallach, S.J.R. (Davis, CA, U.S.A.)	
Rearing bulls with females fails to enhance sexual performance	339
Recén, B., <i>see Petersen, V. et al.</i>	
Redbo, I. (Uppsala, Sweden)	
Changes in duration and frequency of stereotypies and their adjoining behaviours in heifers, before, during and after the grazing period	57
Rieke, A.R., <i>see Rohde Parfet, K.A. et al.</i>	
Rogers, L.J., <i>see Workman, L. and Rogers, L.J.</i>	
Rohde Parfet, K.A., Ganjam, V.K., Lamberson, W.R., Rieke, A.R., vom Saal, F.S. and Day, B.N. (Columbia, MO, U.S.A.)	
Intrauterine position effects in female swine: subsequent reproductive performance, and social and sexual behavior	349
Rojanasthien, S., <i>see Algers, B. et al.</i>	
Seawright, E., <i>see Duncan, I.J.H. et al.</i>	
Shackleton, D.M., <i>see Tan, S.S.L. and Shackleton, D.M.</i>	
Smith, J.N., <i>see Anderson, D.M. et al.</i>	
Steinwall, L., <i>see Algers, B. et al.</i>	
Swartzman-Andert, J., <i>see Zahorik, D.M. et al.</i>	
Tan, S.S.L. and Shackleton, D.M. (Vancouver, B.C., Canada)	
Effects of mixing unfamiliar individuals and of azaperone on the social behaviour of finishing pigs	157
Uvnäs-Moberg, K., <i>see Algers, B. et al.</i>	
Van de Burgwal, J.A., <i>see van Putten, G. and van de Burgwal, J.A.</i>	
Van Liere, D.W., Kooijman, J. and Wiepkema, P.R. (Wageningen, The Netherlands)	
Dustbathing behaviour of laying hens as related to quality of dustbathing material	127

Van Putten, G. and van de Burgwal, J.A. (Zeist, The Netherlands)	
Vulva biting in group-housed sows: preliminary report	181
Vestergaard, K., <i>see</i> Petersen, V. et al.	
Vom Saal, F.S., <i>see</i> Rohde Parfet, K.A. et al.	
Wallach, S.J.R., <i>see</i> Price, E.O. and Wallach, S.J.R.	
Warwick, C. (Worcester, Gt. Britain)	
Reptilian ethology in captivity: observations of some problems and an evaluation of their aetiology	1
Wiepkema, P.R., <i>see</i> van Liere, D.W. et al.	
Wierenga, H.K. and Hopster, H. (Zeist, The Netherlands)	
The significance of cubicles for the behaviour of dairy cows	309
Workman, L. and Rogers, L.J. (Armidale, N.S.W., Australia)	
Pecking preferences in young chicks: effects of nutritive reward and beak-trimming	115
Zahorik, D.M., Houpt, K.A. and Swartzman-Andert, J. (Ithaca, NY, U.S.A.)	
Taste-aversion learning in three species of ruminant	27



Subject Index

Aetiology	
Reptilian ethology in captivity: observations of some problems and an evaluation of their aetiology	1
Aggression	
Varied cages result in more aggression in male CFLP mice	277
Animal welfare	
The science of animal welfare and the subjective experience of animals	191
Azaperone	
Effects of mixing unfamiliar individuals and of azaperone on the social behaviour of finishing pigs	157
Bait shyness	
"Poison shyness" and "bait shyness" developed by wild rats (<i>Rattus rattus L.</i>). IV.	
Effect of poisoning with thallous sulphate	49
Beak-trimming	
Pecking preferences in young chicks: effects of nutritive reward and beak-trimming	115
Behaviour	
Behaviour of sows and piglets during farrowing under free-range conditions	169
The behaviour of farrowing sows with free and operant access to an earth floor	363
The significance of cubicles for the behaviour of dairy cows	309
Behaviour changes	
Behaviour and weight changes at weaning and regrouping of pigs in relation to teat quality	143
Behaviour responses	
Effects of early handling on later behaviour and stress responses in the silver fox (<i>Vulpes vulpes</i>)	383
Broiler breeder domestic fowl	
Sexual behaviour and fertility in broiler breeder domestic fowl	201
Bulls	
Rearing bulls with females fails to enhance sexual performance	339
Calf stimulus	
Effect of the calf stimulus on the milk yield of Zebu-type cattle	187
Calves	
Effects of changing housing on open-field behavior of calves	215
Captive cheetahs	
Carcass feeding of captive cheetahs (<i>Acinonyx jubatus</i>): the effects of a naturalistic feeding program on oral health and psychological well-being	373
Carcass feeding	
Carcass feeding of captive cheetahs (<i>Acinonyx jubatus</i>): the effects of a naturalistic feeding program on oral health and psychological well-being	373
Cattle	
Diet selection of bonded and non-bonded free-ranging sheep and cattle	231
CFLP mice	
Varied cages result in more aggression in male CFLP mice	277
Chicks	
Pecking preferences in young chicks: effects of nutritive reward and beak-trimming	115
Cubicles	
The significance of cubicles for the behaviour of dairy cows	309

Dairy cows	
Spacing of dairy cows at a food trough	69
The significance of cubicles for the behaviour of dairy cows	309
Diet selection	
Diet selection of bonded and non-bonded free-ranging sheep and cattle	231
Dustbathing behaviour	
Dustbathing behaviour of laying hens as related to quality of dustbathing material	127
Early handling	
Effects of early handling on later behaviour and stress responses in the silver fox (<i>Vulpes vulpes</i>)	383
Earth floor	
The behaviour of farrowing sows with free and operant access to an earth floor	363
Farrowing	
Behaviour of sows and piglets during farrowing under free-range conditions	169
Farrowing sows	
The behaviour of farrowing sows with free and operant access to an earth floor	363
Fertility	
Sexual behaviour and fertility in broiler breeder domestic fowl	201
Finishing pigs	
Effects of mixing unfamiliar individuals and of azaperone on the social behaviour of finishing pigs	157
Food trough	
Spacing of dairy cows at a food trough	69
Free-range conditions	
Behaviour of sows and piglets during farrowing under free-range conditions	169
Gentling	
The effect of gentling on heart rate, flight distance and aversion of sheep to a handling procedure	243
Grazing period	
Changes in duration and frequency of stereotypies and their adjoining behaviours in heifers, before, during and after the grazing period	57
Group-housed sows	
Vulva biting in group-housed sows: preliminary report	181
Grunting rate	
The relationship between teat stimulation, oxytocin release and grunting rate in the sow during nursing	267
Haematocrit	
Changes in heart rate, plasma cortisol and haematocrit of sheep during a shearing procedure	91
Handling	
Some effects of repeated handling on stress responses in sheep	253
Handling procedure	
The effect of gentling on heart rate, flight distance and aversion of sheep to a handling procedure	243
The stress response in sheep during routine handling procedures	83
Harp seals	
The impact of tourism on harp seals (<i>Phoca groenlandica</i>) in the Gulf of St. Lawrence, Canada	15
Heart rate	
Changes in heart rate, plasma cortisol and haematocrit of sheep during a shearing procedure	91

Heifers	
Changes in duration and frequency of stereotypies and their adjoining behaviours in heifers, before, during and after the grazing period	57
Housing	
Effects of changing housing on open-field behavior of calves	215
Intraherd spacing behaviour	
Intraherd spacing behaviour of female reindeer: effects of kinship, age and habituation ...	41
Intrauterine position effects	
Intrauterine position effects in female swine: subsequent reproductive performance, and social and sexual behavior	349
Kangaroos	
Kangaroos (Book review)	305
Laying hens	
Dustbathing behaviour of laying hens as related to quality of dustbathing material	127
Milk yield	
Effect of the calf stimulus on the milk yield of Zebu-type cattle	187
Naturalistic feeding program	
Carcass feeding of captive cheetahs (<i>Acinonyx jubatus</i>): the effects of a naturalistic feeding program on oral health and psychological well-being	373
Nutritive reward	
Pecking preferences in young chicks: effects of nutritive reward and beak-trimming	115
Open-field behavior	
Effects of changing housing on open-field behavior of calves	215
Oral health	
Carcass feeding of captive cheetahs (<i>Acinonyx jubatus</i>): the effects of a naturalistic feeding program on oral health and psychological well-being	373
Oxytocin release	
The relationship between teat stimulation, oxytocin release and grunting rate in the sow during nursing	267
Pecking preferences	
Pecking preferences in young chicks: effects of nutritive reward and beak-trimming	115
Piglets	
Behaviour of sows and piglets during farrowing under free-range conditions	169
Pigs	
Behaviour and weight changes at weaning and regrouping of pigs in relation to teat quality	143
Plasma cortisol	
Changes in heart rate, plasma cortisol and haematocrit of sheep during a shearing procedure	91
Poison shyness	
“Poison shyness” and “bait shyness” developed by wild rats (<i>Rattus rattus L.</i>). IV.	
Effect of poisoning with thallous sulphate	49
Psychological well-being	
Carcass feeding of captive cheetahs (<i>Acinonyx jubatus</i>): the effects of a naturalistic feeding program on oral health and psychological well-being	373
Rats	
“Poison shyness” and “bait shyness” developed by wild rats (<i>Rattus rattus L.</i>). IV.	
Effect of poisoning with thallous sulphate	49
Reindeer	
Intraherd spacing behaviour of female reindeer: effects of kinship, age and habituation ...	41

Reproductive performance	
Intrauterine position effects in female swine: subsequent reproductive performance, and social and sexual behavior.....	349
Reptilian ethology	
Reptilian ethology in captivity: observations of some problems and an evaluation of their aetiology	1
Ruminants	
Taste-aversion learning in three species of ruminants	27
Sexual behaviour	
Intrauterine position effects in female swine: subsequent reproductive performance, and social and sexual behavior	349
Sexual behaviour and fertility in broiler breeder domestic fowl	201
Sexual performance	
Rearing bulls with females fails to enhance sexual performance	339
Shearing	
An evaluation of the contribution of isolation, up-ending and wool removal to the stress response to shearing	103
Changes in heart rate, plasma cortisol and haematocrit of sheep during a shearing procedure	91
Sheep	
Changes in heart rate, plasma cortisol and haematocrit of sheep during a shearing procedure	91
Diet selection of bonded and non-bonded free-ranging sheep and cattle	231
Some effects of repeated handling on stress responses in sheep	253
The effect of gentling on heart rate, flight distance and aversion of sheep to a handling procedure	243
The stress response in sheep during routine handling procedures	83
Silver fox	
Effects of early handling on later behaviour and stress responses in the silver fox (<i>Vulpes vulpes</i>)	383
Social behaviour	
Effects of mixing unfamiliar individuals and of azaperone on the social behaviour of finishing pigs	157
Intrauterine position effects in female swine: subsequent reproductive performance, and social sexual behavior	349
Sows	
Behaviour of sows and piglets during farrowing under free-range conditions	169
The relationship between teat stimulation, oxytocin release and grunting rate in the sow during nursing	267
Stereotypies	
Changes in duration and frequency of stereotypies and their adjoining behaviours in heifers, before, during and after the grazing period	57
Stress response	
An evaluation of the contribution of isolation, up-ending and wool removal to the stress response to shearing.	103
Effects of early handling on later behaviour and stress responses in the silver fox (<i>Vulpes vulpes</i>)	383
Some effects of repeated handling on stress responses in sheep	253
The stress response in sheep during routine handling procedures	83

Subjective experience	
The science of animal welfare and the subjective experience of animals	191
Swine	
Intrauterine position effects in female swine: subsequent reproductive performance, and social and sexual behavior	349
Taste-aversion learning	
Taste-aversion learning in three species of ruminants	27
Teat quality	
Behaviour and weight changes at weaning and regrouping of pigs in relation to teat quality	143
Teat stimulation	
The relationship between teat stimulation, oxytocin release and grunting rate in the sow during nursing	267
Thallous sulphate	
“Poison shyness” and “bait shyness” developed by wild rats (<i>Rattus rattus</i> L.). IV.	
Effect of poisoning with thallous sulphate	49
Tourism	
The impact of tourism on harp seals (<i>Phoca groenlandica</i>) in the Gulf of St. Lawrence, Canada	15
Unfamiliar individuals	
Effects of mixing unfamiliar individuals and of azaperone on the social behaviour of finishing pigs	157
Vulva biting	
Vulva biting in group-housed sows: preliminary report	181
Weaning	
Behaviour and weight changes at weaning and regrouping of pigs in relation to teat quality	143
Weight changes	
Behaviour and weight changes at weaning and regrouping of pigs in relation to teat quality	143
Zebu-type cattle	
Effect of the calf stimulus on the milk yield of Zebu-type cattle	187